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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/256,411	02/24/1999	TAEKO TANAKA	1232-4512	9777

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EXAMINER	
HANNETT, JAMES M	
ART UNIT	**PAPER NUMBER**
2612	18

DATE MAILED: 12/15/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	09/256,411	TANAKA, TAEKO	
	Examiner	Art Unit	
	James M Hannett	2612	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 October 2003 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☐ The proposed amendment(s) will not be entered because:
   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);
   (b) ☐ they raise the issue of new matter (see Note below);
   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.
   NOTE: _____.
3. ☐ Applicant's reply has overcome the following rejection(s): _____.
4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See Examiners response to Argumanets*.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☐ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
   The status of the claim(s) is (or will be) as follows:
   Claim(s) allowed: _____.
   Claim(s) objected to: _____.
   Claim(s) rejected: _____.
   Claim(s) withdrawn from consideration: _____.
8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.
10. ☐ Other: _____

Response to Arguments

Applicant's arguments filed 10/02/2003 have been fully considered but they are not persuasive. The applicants arguments that it is not disclosed in any of the cited references Kawasaki or Suda that the zooming speed is changed on the basis of the shutter speed as the present invention claims. It is noted by the examiner that Kawasaki et al teaches on Column 59, Lines 50-63 the use of a control step of mid-exposure zooming in that a zooming speed is selected in accordance with the exposure time or shutter speed. This feature is viewed by the examiner as equivalent to "the zooming speed is changed on the basis of the shutter speed".

As for the arguments pertaining to Claims 16, 23, and 28, Suda et al teaches in the abstract the use of an image sensing apparatus in the form of a camera which can perform a zooming operation of a zoom lens while maintaining an in-focus state of a focus lens. Suda et al teaches on Paragraph [0002 and 0153] the use of signal detection means for extracting a high-frequency component from an image-sensing signal obtained by an image-sensing device such as a CCD, and detecting a sharpness signal. Suda et al teaches on Paragraph [0032] the use of signal extraction means for extracting a peak value of a luminance component in an image-sensing signal. Suda et al teaches in the abstract the use of evaluation value calculating means for averaging sharpness signals during a zooming operation to calculate a focus evaluation value. Suda et al teaches that the focus evaluation value is calculated in accordance with a plurality of focus detection means.

Suda et al does not teach the use of changing the time duration in which the sharpness signals are averaged during the zooming operation in accordance with an object illuminance obtained from the luminance signal.

Sekine et al teaches on Column 2, Lines 10-17 that if an object has a low luminance signal, a long exposure time is set to obtain a sufficiently high signal to noise ratio. Sekine et al teaches on Column 7, Lines 35-40 that the sampling frequency of the shake detection mean or the time duration in which the sharpness signals are averaged is equal to the accumulation time of the image pickup means. Therefore, when the camera detects an object that has a low luminance signal, the exposure time for the camera would be increased to obtain a sufficiently high signal to noise ratio and therefore, the time duration over which the sharpness signals are averaged would be changed in accordance with the illuminance obtained from the luminance signal.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the camera of Suda et al with the luminance detection and correction means of Sekine et al in order to obtain a sufficiently high signal to noise ratio when the object in the field of view has a low luminance signal. The brightness of the object being photographed is viewed by the examiner as the illuminance obtained from the luminance signal.

As for the arguments pertaining to Claims 18, 25, and 29; Suda et al teaches in the abstract the use of an image sensing apparatus in the form of a camera which can perform a zooming operation of a zoom lens while maintaining an in-focus state of a focus lens. Suda et al teaches on Paragraph [0002 and 0153] the use of signal detection means for extracting a high-frequency component from an image-sensing signal obtained by an image-sensing device such as a CCD, and detecting a sharpness signal. Suda et al teaches in the abstract the use of evaluation value calculating means for averaging sharpness signals during a zooming operation to calculate

a focus evaluation value. Suda et al teaches that the focus evaluation value is calculated in accordance with a plurality of focus detection means.

Suda et al does not teach the use of Shake detection means for detecting a shake of a camera. Suda et al does not teach the use of changing the time duration in which the sharpness signals are averaged during the zooming operation in accordance with the information from a shake detection means.

Sekine et al teaches on Column 2, Lines 10-17 that if an object appears to be moving at a high speed is to be photographed, a high-speed shutter mode is set to prevent blurring of the edge of the object image. Sekine et al teaches on Column 7, Lines 35-40 that the sampling frequency of the shake detection mean or the time duration in which the sharpness signals are averaged is equal to the accumulation time of the image pickup means. Therefore, when the camera detects an object that appears to be moving at a high speed as a result of the camera shaking, the exposure time for the camera would be decreased to prevent blurring and therefore, the time duration which the sharpness signals are averaged would be changed in accordance with the movement detected by the shake detection means.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the camera of Suda et al with the shake detection and correction means of Sekine et al in order to prevent blurring of an image when the object in the field of view appears to be moving at a high rate of speed due to the movement of the camera.

As for the arguments pertaining to Claims 20 and 28, Suda et al teaches in the abstract the use of an image sensing apparatus in the form of a camera which can perform a zooming operation of a zoom lens of a first lens group while maintaining an in-focus state of a focus lens

of a second lens group. Suda et al teaches on Paragraph [0002 and 0153] the use of signal detection means for extracting a high-frequency component from an image-sensing signal obtained by an image-sensing device such as a CCD, and detecting a sharpness signal. Suda et al teaches the use of zoom speed detection means to detect a speed of a zoom lens. Suda et al teaches in Paragraph [0028] the use of memory means for storing data representing a positional relationship between the zoom lens and the focus lens. Suda et al teaches in Paragraph [0028] the use of speed calculation means for determining a driving velocity of the focus lens on the basis of information stored in the memory. Suda et al further teaches the use of speed addition means for adding a compensating velocity to the velocity of the focus lens in order to compensate for a movement of a focus plane caused by the zooming operation of a zoom lens on the basis of the data in memory. Suda et al further teaches that the correction speed to be added to the standard moving speed of the focus lens is calculated on the basis of the focus signal or the magnitude of the focus evaluation value. Suda et al teaches in the abstract the use of focus control means for averaging sharpness signals during a zooming operation to calculate a focus evaluation value. Suda et al teaches that the focus evaluation value is calculated in accordance with a plurality of focus detection means.

Suda et al does not teach the use of changing the time duration in which the sharpness signals are averaged during the zooming operation in accordance with the speed of the zooming operation.

Sekine et al teaches on Column 2, Lines 10-17 that if an object appears to be moving at a high speed is to be photographed, a high-speed shutter mode is set to prevent blurring of the edge of the object image. Sekine et al teaches on Column 7, Lines 35-40 that the sampling frequency

of the shake detection mean or the time duration in which the sharpness signals are averaged is equal to the accumulation time of the image pickup means. Therefore, when the camera detects an object that appears to be moving at a high speed as a result of the camera zoom operation, the exposure time for the camera would be decreased to prevent blurring and therefore, the time duration which the sharpness signals are averaged would be changed in accordance with the speed of the zoom operation.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to enable the camera of Suda et al with the movement detection and correction means of Sekine et al in order to prevent blurring of an image when the object in the field of view appears to be moving at a high rate of speed due to the movement of the camera zoom lens.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James M Hannett whose telephone number is 703-305-7880. The examiner can normally be reached on 8:00 am to 5:00 pm M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 703-305-4929. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9314.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-6789.

James Hannett
Examiner
Art Unit 2612

JMH

November 21, 2003

WENDY R. GARBER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600